

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

TRANSLATION
PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

NEC04P210A

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/018009

International filing date (day/month/year)

03.12.2004

Priority date (day/month/year)

19.12.2003

International Patent Classification (IPC) or both national classification and IPC

Applicant

NEC CORPORATION

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Authorized officer

Facsimile No.

Telephone No.

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2004/018009

Box No. I

Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2004/018009

Box No. V	Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims		YES
	Claims	1-7	NO
Inventive step (IS)	Claims		YES
	Claims	1-7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims		NO
2. Citations and explanations:			
<p>Document 1: JP, 2003-192925, A (Sony Corporation), 9 July, 2003 (09.07.03), the claims, paragraph [0010], [0013], [0021], [0024], [0027], [0035]-[0047] and the Example</p> <p>The subject matters of claims 1-7 do not appear to be novel or to involve an inventive step, since they are described in document 1 cited in the ISR.</p> <p>Document 1 describes a fire-retardant thermoplastic resin composition produced by mixing, as a fire retardant, alkali metal hydrate in a plant-derived biodegradable resin such as polylactic acid. Document 1 further describes that, in order to improve the preservation stability, the content of impurities including an alkali metal substance (e.g., Na₂O or the like when the alkali metal hydrate is aluminum hydroxide) is reduced and the purity of the alkali metal hydrate is set to be equal to or higher than 99.5%. That is, in the invention described in the cited document 1, the total content of the impurities including the alkali metal substance is equal to or lower than 0.5%, and the lower limit of the total content is not limited to a particular value.</p> <p>Meanwhile, in the example of the present application, when the alkali metal hydrate is aluminum hydroxide, the content of the alkali metal substance as an impurity represents the total amount of Na₂O. Further, there is no mention on other alkali metal substances than Na₂O in other description in the specification of the present application.</p> <p>Therefore, it is highly possible that the subject matters of claims 1-7 and the invention described in the cited document 1 overlap each other in terms of the content of the alkali metal substance in the alkali metal hydrate. Thus, no significant difference is recognized between the two.</p> <p>Furthermore, the subject matters of claims 1-7 and the invention described in the cited document 1 are the same in their approach in that the impurities such as the alkali metal substance in the alkali metal hydrate are removed to improve the preservation stability (which is naturally considered to include hydrolysis resistance of polymer). Thus, even if there is a difference between the two, it is not particularly difficult to set the content of the alkali metal substance to be equal to or lower than 0.2 mass % in the invention described in the cited document 1. Further, in view of this, the subject matters of claims 1-7 are not considered to have a special effect.</p> <p>Cited document 1 describes or suggests the addition of a compound having an aromatic ring as a compound for supporting the fire retardancy, a crystal nucleus agent, a high-strength fiber or the like.</p>			

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/JP2004/018009

Box No. VI **Certain documents cited**

1. Certain published documents (Rule 43bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2004-307528 A [E, X]	04.11.2004	02.04.2003	
JP 2004-263180 A [E, X]	24.09.2004	12.02.2004	12.02.2003

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)